

**To:** Ruhl, Christopher[Ruhl.Christopher@epa.gov]  
**From:** McGrath, Shaun  
**Sent:** Wed 8/19/2015 2:28:37 PM  
**Subject:** Fwd: info for this morning meeting

Sent from my iPhone

Begin forwarded message:

**From:** "Ostrander, David" <Ostrander.David@epa.gov>  
**Date:** August 19, 2015 at 8:02:17 AM MDT  
**To:** "McGrath, Shaun" <McGrath.Shaun@epa.gov>  
**Cc:** "Myers, Craig" <Myers.Craig@epa.gov>, "Ruhl, Christopher" <Ruhl.Christopher@epa.gov>, "Calanog, Steve" <Calanog.Steve@epa.gov>  
**Subject:** info for this morning meeting

The HCN article gives you the statement about relative volume of this discharge to the overall impact from ongoing drainages.

We believe the blue green color in the upper stretches of the Animas and Cement Creek likely is a result of the fluctuating oxidation states of iron and other metals as they are exposed to oxygen and proceed through the neutralization process. Iron, for example, is a blue green color in its reduced form and converts to an orange color as it is oxidized. Hence, color changes and a green color in particular are often associated with acidic mine drainage.

We are collecting samples today to confirm. In addition we will be testing for algae in these locations as well as further downstream.

EPA has formed a team of state, regional and headquarters experts and is developing a long term strategy to assess impacts from this spill. The team will develop a draft strategy outline and should have a proposal in the next week.

As to PCBs and Dioxin, if there was any transformers or other items left in the mine is speculation at this point. As part of a longer term investigation of the watershed, EPA will evaluate the possibility of these contaminants. In the short term, what was released from the mine is what has been released for decades and will continue to release until a

comprehensive long term remedy for the mining district is conducted. (maybe not the best answer, but there is not much we can do at this time and if there are these constituents, they are potentially present before and after this release.)

Below are is the cooperative agreement status:

- **La Plata County:** \$200,000 agreement in place. County should be submitting first round of invoices shortly. County also working on setting up long term cooperative agreement directly with EPA.
- **City of Durango:** Cooperative agreement package sent to city. City indicates should be submitting application within the day.
- **Southern Ute:** EPA working with tribe on application submitted.
- **San Juan Basin Health:** EPA working with tribe on application submitted.

**San Juan County (CO):** EPA sent application last week. No response received to date

Let me know if you have other questions.